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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/607,567

06/26/2003

Hung T. Dinh

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4435

7590

01/25/2006

Marilyn Smith Dawkins
Intellectual Property Law Dept.
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EXAMINER

CHANNAVAJJALA, SRIRAMA T

ART UNIT

PAPER NUMBER

2166

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/607,567

Applicant(s)

DINH ET AL.

Examiner

Srirama Channavajjala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/23/03.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are pending in this application.

Drawings

2. The Drawings filed on 6/26/2003 are acceptable for examination purpose.

Information Disclosure Statement

3. The information disclosure statement filed on 6/23/2003 is in compliance with the provisions of 37 CFR 1.97, and has been considered and a copy is enclosed with this Office Action.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claim 4,6,9,11,14,16,18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. At page 12, claim 6 is dependents on claim 6 itself. In the present office action, Examiner assumes claim 6 is dependent on claim 1, and claim 6 is treated as dependent on claim 1 in the office action.

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7. As to Claims 6,11,16,19, these claims having abbreviation "UTF-8". It is not clear what is meant by "UTF-8" in the claim. Applicant required to particularly point out and distinctly write the claim especially "UTF-8" in full form.

8. As to claims 4,9,14,18, these claims having abbreviation "DBCS". It is not clear what is meant by "DBCS" in the claim. Applicant required to particularly point out and distinctly write the claim especially "DBCS" in full form.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. **Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Bruso et al. [hereafter Bruso]*, US Patent No. 6615219, filed on Dec 29,1999, published on Sept 2,2003 in view of *Holenstein et al. [hereafter Holenstein]*, US Patent No. 6745209 filed on Aug 15, 2001, published on June 1,2004.**

11. As to claim 1, 7,12, Bruso teaches a system which including 'determining that blob data in a source field is associated with a first coded character set identifier' [col 3, line 20-24, line 26-29], Bruso teaches managing binary large objects in a database particularly in a relational database, Bruso also teaches both non-BLOB and BLOB data especially BLOB identifiers or BLOB ID refers only to BLOB data that including length code, address code as detailed in col 3, line 26-29;

'determining a second coded character set identifier' [col 3, line 58-65, line 66-67, col 4, line 1-5, line 16-18], Bruso teaches each data block stores one or more rows of data, as noted in the database management system, that includes a page number code which tells the number of pages, page size code and data records as detailed in col 3, line 59-65;

It is however, noted that Bruso does not specifically teach target field, replication the blob data from the source field to the target field, although Bruso specifically teaches relational database table having both non-BLOB and BLOB data, particularly BLOB data is identified with BLOB ID as detailed in fig 2-3. On the other hand, Holenstein disclosed 'target field' [[col 11, line 29-31, col 11, line 63-65], Holenstein specifically teaches both source database and target database ; 'replication the blob

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data from the source field to the target field' [[col 11, line 22-32, col 12, line 56-64], Holenstein specifically teaches synchronizing source database and target database in a database replication system [see fig 2], Holenstein also teaches CONS [col 4, line 49] supports bidirectional database replication particularly associated with Binary Large Object (BLOB) replication as detailed in col 12, line 56-64.

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Holenstein into database management system having binary large objects of Bruso et al because both Bruso, Holenstein are directed to databases, particularly relational databases, also both Bruso, Holenstein specifically directed to "BLOB" [see Bruso: fig 2-3; Holenstein: col 12, line 56-64], also both directed to cyclic redundancy check of data in the database [Bruso: col 3, line 26-27; Holenstein: col 10, line 32-37]. It is also noted that Holenstein directed to database synchronization process, particularly directed to database replication system where source and target databases synchronized.

One of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Holenstein into database management system having binary large objects of Bruso et al because that would have allowed users of Bruso to synchronization in a database replicate system particularly source database and target database, thus any change in data either from the source or target database synchronized to keep updated data in the databases [see Holenstein: Abstract], bringing

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the advantages of dynamic loading of data, effectively managing system resources

[Holenstein: col 13, line 7-11].

12. As to claim 2, and 13, Holenstein disclosed 'target field has an associated type of character' [col 10, line 1-4].

13. As to claim 3,5,8,10,15, Bruso disclosed 'first coded character set identifier col 3, line 25] specifies a character set [col 3, line 25, line 30-31] , a code page, and an encoding scheme' [col 3, line 47-48].

14. As to claim 17, Bruso disclosed 'a processor, and a storage device encoded with instructions that when executed on the processor' [fig 5B-5C,fig 6, col 7, line 7-12]; 'determining that blob data in a source field is associated with a source coded character set identifier, wherein the source coded character set identifier specifies a source character set, a source code page, and a source encoding scheme' col 3, line 20-24, line 26-29], Bruso teaches managing binary large objects in a database particularly in a relational database, Bruso also teaches both non-BLOB and BLOB data especially BLOB identifiers or BLOB ID refers only to BLOB data that including length code, address code as detailed in col 3, line 26-29; 'determining 'coded character set identifier' col 3, line 24], BLOB ID; associated type of character, and code page, encoding scheme' col 3, line 42-51, fig 3].

It is however, noted that Bruso does not specifically teach target field, replication the blob data from the source field to the target field, although Bruso specifically teaches relational database table having both non-BLOB and BLOB data, particularly BLOB data is identified with BLOB ID as detailed in fig 2-3. On the other hand, Holenstein disclosed 'target field' [[col 11, line 29-31, col 11, line 63-65], Holenstein specifically teaches both source database and target database ; 'replication the blob data from the source field to the target field' [[col 11, line 22-32, col 12, line 56-64], Holenstein specifically teaches synchronizing source database and target database in a database replication system [see fig 2], Holenstein also teaches CONS [col 4, line 49] supports bidirectional database replication particularly associated with Binary Large Object (BLOB) replication as detailed in col 12, line 56-64.

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Holenstein into database management system having binary large objects of Bruso et al because both Bruso, Holenstein are directed to databases, particularly relational databases, also both Bruso, Holenstein specifically directed to "BLOB" [see Bruso: fig 2-3; Holenstein: col 12, line 56-64], also both directed to cyclic redundancy check of data in the database [Bruso: col 3, line 26-27; Holenstein: col 10, line 32-37]. It is also noted that Holenstein directed to database synchronization process, particularly directed to database replication system where source and target databases synchronized.

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One of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Holenstein into database management system having binary large objects of Bruso et al because that would have allowed users of Bruso to synchronization in a database replicate system particularly source database and target database, thus any change in data either from the source or target database synchronized to keep updated data in the databases [see Holenstein: Abstract], bringing the advantages of dynamic loading of data, effectively managing system resources [Holenstein: col 13, line 7-11].

15. As to claim 20, Holenstein disclosed 'source relational database and the target field is in a target relational database' [see fig 1, database A, database B, having database tables respectively].

16. As to claim 4,9,14,18, both Bruso, Holenstein do not specifically teach DBCS or double byte character set, although both Bruso, Holenstein does support one-byte i.e. 8-bit [256 characters]. It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to use 2-byte code i.e. 16 bit [256 x 256 = 65,536 characters] because that would have allowed users of Bruso, Holenstein relational databases support various data types, and other relevant supported encoding schemes.

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17. **Claims 6,11,16,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Bruso et al. [hereafter Bruso]*, US Patent No. 6615219, filed on Dec 29,1999, published on Sept 2,2003 , Holenstein et al. [hereafter Holenstein], US Patent No. 6745209 filed on Aug 15, 2001, published on June 1,2004 as applied to claims 1,7,12,17 above, and further *in view* of Lindberg et al. [hereafter Lindberg], US Patent No. 6732109 filed on Jan 31, 2001, published on May 4, 2004.**

18. As to claims 6,11,16,19, both Bruso, Holenstein do not specifically teach encoding scheme is UTF-8. On the other hand, Lindberg disclosed 'encoding scheme is UTF-8' [[see col 9-10, table 2-3], Lindberg specifically defines schema based on encoding=UTF-8. Therefore, it would have been obvious to one of the ordinary skilled in the art at the time of applicant's invention to incorporate the teachings of Lindberg into Bruso et al, Holenstein et al. because that would have allowed users of Bruso, Holenstein to implement model layer that transferring information between databases, particularly database being relational database [Lindberg: col 2, line 61-64, col 3, line 35-40] capable of holding information inn a flexible way not limited to 8 bits instead supports different types of objects including various data types as suggested by Lindberg [see col 12, line 60-67].

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Conclusion


The prior art made of record

- a. US Patent No. 6615219
- b. US Patent No. 6745209
- c. US Patent No. 6732109

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is 571-272-4108. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, T, can be reached on (571) 272-3978. The fax phone numbers for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

SC
Patent Examiner.
January 13, 2006.


SRIRAMA CHANNAVAJJALA
PRIMARY EXAMINER